

Amendments to the Specification:

Please replace the paragraph beginning on page 10, line 13 with the following amended paragraph:

In one embodiment, the cellular radio core 110 includes a transmitter/receiver section that is connected to an off-chip antenna (not shown). The transmitter/receiver section is a direct conversion radio that includes an I/Q demodulator, transmit/receive oscillator/clock generator, multi-band power amplifier (PA) and PA control circuit, and voltage-controlled oscillators and synthesizers. In another embodiment of the transmitter/receiver section ~~112~~, intermediate frequency (IF) stages are used. In this embodiment, during cellular reception, the transmitter/receiver section converts received signals into a first intermediate frequency (IF) by mixing the received signals with a synthesized local oscillator frequency and then translates the first IF signal to a second IF signal. The second IF signal is hard-limited and processed to extract an RSSI signal proportional to the logarithm of the amplitude of the second IF signal. The hard-limited IF signal is processed to extract numerical values related to the instantaneous signal phase, which are then combined with the RSSI signal.

Please replace the paragraph beginning on page 11, line 13 with the following amended paragraph:

Turning now to the short-range wireless transceiver core 130, the short-range wireless transceiver core 130 contains a radio frequency (RF) modem core 132 that communicates with a link controller core 134. The processor core 150 controls the link controller core 134. In one embodiment, the RF modem core 132 has a direct-conversion radio architecture with an integrated VCO and frequency synthesizer. The RF-unit 132 includes an RF receiver connected to an analog-digital converter (ADC), which in turn is connected to a modem ~~146~~ performing digital modulation, channel filtering, AFC, symbol timing recovery, and bit slicing operations. For transmission, the modem is connected to a digital to analog converter (DAC) that in turn drives an RF transmitter.

Please replace the paragraph beginning on page 16, line 11 with the following amended paragraph:

Additionally, the processor 220 is connected to the multi-mode wireless communicator device 100, which is connected to an antenna 232. The device 100 satisfies the need to access electronic mail, paging, mode/facsimile, remote access to home computers and the Internet. The antenna 232 can be a loop antenna using flat-strip conductors such as printed circuit board wiring traces as flat strip conductors have lower skin effect loss in the rectangular conductor than that of antennas with round-wire conductors. One simple form of wireless communication device 100 is a wireless link to a cellular telephone where the user simply accesses a cellular channel similar to the making of a regular voice call. ~~Also mention that one~~ One channel is reserved for making voice calls. Typically, data channels are not usable for voice communications because of the latency and low packet reliability, so a dedicated voice channel is necessary. In one implementation, GPRS, there are a total of 8 channels per user, one of which is dedicated to voice when the user decides to make a voice call. This voice connection is independent of the data connection.

Please replace the paragraph beginning on page 19, line 19 with the following amended paragraph:

The Web is based on a client/server model where Web pages reside on host computers that "serve up" pages when the user's computer (client computer) requests them. As the user "surfs" the Web, a browser can request data from the database on a server computer that processes and replies the desired data back to the computer system of FIG. 2 and to display that request when the request is fulfilled by the server. The client computer runs a browser software which asks for specific information by sending a HTTP request across the Internet ~~450~~ connection to the host computer. When the host computer receives the HTTP request, it responds by sending the data back to the client.